

**REMARKS**

Claims 1-3 and 5-30 are pending in this Application. The Examiner rejected these claims in an office action dated May 7, 2004. That action has been made final. For the reasons that follow, the Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

**CLAIM REJECTIONS - 35 USC § 103**

Claims 1-3, and 5-30 were rejected under Section 103(a) as being obvious and unpatentable over US Pub. No, 2001-005541 applied for by Black in view of USPN 6,069,969 issued to Keagy.

***Claims 1-3 and 5-8:*** Claim 1 is directed to an electronic writing instrument. As amended in a prior response, Claim 1 requires the following limitation not taught by Black or Keagy. :

- a converter configured to convert fingerprint features identified by the fingerprint scanner into a private key code.

The Examiner notes that Black fails to teach this limitations. Instead, the Examiner relies on Keagy, col. 6, lines 31-43, and col. 11, lines 1-40. Col. 6, line 31-43 describes a raster scanning process in which an output video signal is digitized and the minutia of "a fingerprint image is automatically located, mapped and recorded as a form of electronic 'signature.' The section further provides that the "'signature' may be compared to similarly generated electronic signatures called templates." In its background section Keagy states: "The total collection of minutiae collectively comprise a 'signature' uniquely identifying the owner of the fingerprint. This signature will be hereafter referred to as a 'template'. Keagy, col. 1, lines 53-56.

Keagy, col. 11, lines 1-40 describes various use of encryption techniques for encoding a template into an "enciphered data collection that is then converted to a two dimensional barcode." Keagy, col. 11, lines 1-5. Template data representing fingerprint features can be compressed and then encrypted using an independently generates session key. Keagy, col. 11, lines 10-12. The session key is then

encrypted with a rightful owner's public key. Keagy, col. 11, lines 12-13. The encrypted template data and session key are then encoded into a spatial pattern such as a bar code. Keagy, col. 11, lines 13-15. The bar code can be later decoded and decrypted to reveal the template data to be compared to a live fingerprint. Keagy, col. 11, lines 23-28.

Nothing in the sections cited by the examiner teach or suggest a converter configured to convert fingerprint features identified by the fingerprint scanner into a private key code as required by Claim 1. Keagy merely describes encrypting fingerprint features using an session key and then converting the encrypted date into a special pattern.

For at least this reason, Claim 1 is felt to distinguish over the cited art. Claims 2, 3, and 5-8 depend either directly or indirectly from claim 1 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 1, are neither shown nor suggested in the references of record, either singly or in combination with one another.

Claim 3, for example, requires that the converter of Claim 1 be configured to "convert fingerprint features identified by the fingerprint scanner into a private key code, wherein the private key code includes at least one digit for each feature identified by the feature identifier, each digit having a value representing a degree of the fingerprint feature associated with that digit." Rejecting Claim 3, the examiner relied on Keagy, col. 6, lines 22-56 and col. 11, lines 1-6 and 12-23. As pointed out above, Keagy does not teach converting fingerprint features into a private key code. Furthermore, the cited sections mention nothing about any type of code made up of digits in the specific manner required by Claim 3.

**Claims 9-11 and 26:** Claim 9 is directed to a method and requires the following limitations:

1. scanning a fingerprint to obtain fingerprint data related to fingerprint features;
2. transforming the fingerprint data into a private key code; and

3. creating a public key code from the private key code.

As indicated above, the cited references fail to teach or suggest transforming the fingerprint data into a private key code let alone creating a public key code from such a private key code.

For at least this reason, Claim 9 is felt to distinguish over the cited art. Claims 10-11 and 26 depend either directly or indirectly from claim 9 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 9, are neither shown nor suggested in the references of record, either singly or in combination with one another.

Claim 26, for example, requires that the private key code include at least one digit for each feature identified by the feature identifier, each digit having a value representing a degree of the fingerprint feature associated with that digit. As noted with respect to the rejection of Claim 3, the cited references mention nothing about any type of code made up of digits in the specific manner required by Claim 26.

**Claims 12-15 and 27:** Claim 12 is directed to a method and requires the following limitations:

1. receiving fingerprint data;
2. transforming the fingerprint data into a private key code uniquely identifying the fingerprint;
3. deriving a public key code from the private key code; and
4. incorporating the public key code into an electronic signature.

As indicated above, the cited references fail to teach or suggest transforming the fingerprint data into a private key code let alone creating a public key code from such a private key code. Moreover those references fail to teach or suggest incorporating a public key code so created into an electronic signature.

For at least this reason, Claim 12 is felt to distinguish over the cited art. Claims 13-15 and 27 depend either directly or indirectly from claim 12 and are

allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 12, are neither shown nor suggested in the references of record, either singly or in combination with one another.

Claim 27, for example, requires that the private key code include at least one digit for each feature identified by the feature identifier, each digit having a value representing a degree of the fingerprint feature associated with that digit. As noted with respect to the rejection of Claim 3, the cited references mention nothing about any type of code made up of digits in the specific manner required by Claim 27.

**Claims 16-18 and 28:** Claim 16 is directed to one or more computer readable media having instructions that when executed perform a number of steps that include:

1. converting the identified fingerprint features into a private key code.

As indicated above, the cited references fail to teach or suggest converting fingerprint features into a private key code. For at least this reason, Claim 16 is felt to distinguish over the cited art. Claims 17, 18, and 28 depend either directly or indirectly from claim 16 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 16, are neither shown nor suggested in the references of record, either singly or in combination with one another.

Claim 28, for example, requires that the private key code include at least one digit for each feature identified by the feature identifier, each digit having a value representing a degree of the fingerprint feature associated with that digit. As noted with respect to the rejection of Claim 3, the cited references mention nothing about any type of code made up of digits in the specific manner required by Claim 28.

**Claims 19-25 and 29:** Claim 19 is directed to one or more computer readable media having instructions that when executed perform a number of steps that include:

1. receiving fingerprint data from an electronic writing instrument;
2. creating a public key code using the fingerprint data; and
3. creating an electronic signature using the public key code.

As indicated above, the cited references fail to teach or suggest creating a private key code using fingerprint data let alone creating a public key code from such a private key code. Moreover those references fail to teach or suggest creating an electronic signature using a public key code so created.

For at least this reason, Claim 19 is felt to distinguish over the cited art. Claims 20-25 and 29 depend either directly or indirectly from claim 19 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 19, are neither shown nor suggested in the references of record, either singly or in combination with one another.

Claim 29, for example, requires that the private key code include at least one digit for each feature identified by the feature identifier, each digit having a value representing a degree of the fingerprint feature associated with that digit. As noted with respect to the rejection of Claim 3, the cited references mention nothing about any type of code made up of digits in the specific manner required by Claim 29.

**Claim 30:** Claim 30 is directed an electronic writing instruments that requires a means for converting fingerprint features identified by the means for identifying into a private key code. As indicated above, the cited references fail to teach or suggest a means for converting fingerprint features into a private key code. For at least this reason, Claim 30 is felt to distinguish over the cited art.

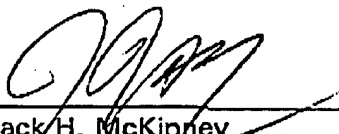
#### CONCLUSION

Claims 1-3 and 5-30 are felt to be in condition for allowance. Consequently, early and favorable action allowing these claims and passing the application to issue is earnestly solicited. The foregoing is believed to be a complete response to the outstanding Office Action.

Respectfully submitted,

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